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| APPLICATION NO.                                   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/672,863  | 09/26/2003  | Paul A. Edney        | 15066US01           | 1278             |
| 7590 10/31/2007<br>McANDREWS, HELD & MALLOY, LTD. |             |                      | EXAMINER            |                  |
| 34th Floor  |             |                      | KISH, JAMES M       |                  |
| 500 W. Madison Street<br>Chicago, IL 60661        |             | ·                    | ART UNIT            | PAPER NUMBER     |
| <b></b>   |             |                      | 3737                |                  |
|   |             |                      |                     |                  |
|   |             | ·                    | MAIL DATE           | DELIVERY MODE    |
|   |             | •                    | 10/31/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.   | Applicant(s)   |  |  |  |
|---|---|--|--|--|--|
|   | 10/672,863  | EDNEY ET AL.   |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |
|   | James Kish  | 3737   |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address   |   |  |  |  |  |
| Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,   |   |  |  |  |  |
| WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION (136(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from (6), cause the application to become ABANDON | DN.<br>timely filed<br>m the mailing date of this communication.<br>NED (35 U.S.C. § 133). |  |  |  |
| Status  |   | •  |  |  |  |
|   | Responsive to communication(s) filed on <u>04 April 2007</u> .  |  |  |  |  |
| / <del></del>   | ,   |  |  |  |  |
| •   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |
| 4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.   |   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |  |  |  |  |
| 5)⊠ Claim(s) <u>1-7</u> is/are allowed.   |   |  |  |  |  |
| 6)⊠ Claim(s) <u>8-10,15 and 20</u> is/are rejected.   |   |  |  |  |  |
| 7) Claim(s) 11-14 and 16-19 is/are objected to.   | or election requirement   | ·  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |   |  |  |  |  |
| Application Papers  |   |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |   |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:  |   |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |   |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |   |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |  |  |  |  |
|   |   |  |  |  |  |
|   |   |  |  |  |  |
| Attachment(s)   |   |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) Interview Summa  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)  | Paper No(s)/Mail<br>5) Notice of Informa  |  |  |  |  |
| Paper No(s)/Mail Date   | 6) Other:   |  |  |  |  |

### **DETAILED ACTION**

## Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8-10 and 15 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Munro (US Patent No. 7,202,941). Munro discloses transmitting at least one laser signal toward a target and receiving at least a portion of the transmitted signal back from the target. One phase computing algorithm that can be used in place of a DFT by the digital processor of the system is the use of non-linear regression curve fitting for estimating the received sinusoid's amplitude, offset, frequency and phase. The frequency is known, thus simplifying (i.e. optimizing) the non-linear regression. See column 42, lines 45-53.

# Allowable Subject Matter

Claims 1-7 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The processing of a specific type of signal, e.g. optical coherence tomography (OCT), using digital data points that represent only a small portion of a larger signal within the time domain utilizing non-linear regression with a sinusoidal model reads over the prior art of record.

Claims 11-14 and 16-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Kish whose telephone number is 571-272-5554. The examiner can normally be reached on 8:30 - 5:00 ~ Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**JMK** 

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